	Application No.	Applicant(s)
Notice of Allowability	10/004,471	STAIGER, DIETER E.
	Examiner	Art Unit	
	George L. Opie	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *arguments submitted 03/29/2006 and amendments filed 06/20/2006*.

2. ☒ The allowed claim(s) is/are *1,2,8,10 and 12-21 now renumbered 1-14*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☒ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

            International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

        Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Serial Number: 10/004,471
Art Unit: 2194

Examiner's Amendment

An examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee.

In a Telephone call on 20 June 2006, authorization for this Amendment was given by Ms. Anne V. Dougherty (Reg. No. 30,374).

The specification and claims have been amended as indicated by Applicant in the e-mail Amendment submitted 20 June 2006, which is attached hereto.

Contact Information:

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private-PAIR or Public-PAIR.

Status information for unpublished applications is available through Private-PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Serial Number: 10/004,471
Art Unit: 2194

Hand carried responses should be delivered to the *Customer Service Window* (Randolph Building, 401 Dulany Street, Alexandria, Virginia 22314) and, if submitting an electronic copy on floppy or CD, to expedite its processing, please notify the below identified examiner prior to delivery, so that the Applicant can "handoff" the electronic copy directly to the examiner.

All responses sent by U.S. Mail should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at **(571) 272-2100.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at 571-272-3766 or via e-mail at *George.Opie@uspto.gov.* Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of	:	June 20, 2006
Dieter E. Staiger	:	Group Art No.: 2194
Serial No. 10/004,471	:	Examiner: G.L. Opie
Filed: December 4, 2001	:	IBM Corporation
Anne Vachon Dougherty		
Title: INTERCOMMUNICATION PREPROCESSOR		3173 Cedar Road Yorktown Hts, N.Y. 10598

PROPOSED AMENDMENT

Commissioner for Patents
Sir:

Pursuant to a telephone interview between the undersigned attorney and Examiner Opie, Applicant submits the following:

Proposed Amendment to the Specification to change the Title of the Invention as set forth on page 2;

Proposed Amendments to the Claims as reflected in the Listing of Claims which begins on page 3.

Remarks/Arguments which begin on page 9.

Amendment to the Specification

On page 1, line 1, amend the Title of the Invention as set forth below:

MESSAGE PREPROCESSING METHOD AND DEVICE FOR COMPUTER NETWORK COMMUNICATIONS ~~INTERCOMMUNICATION PREPROCESSOR~~

On page 26, line 1, amend the Title of the Abstract of the Invention as set forth below:

MESSAGE PREPROCESSING METHOD AND DEVICE FOR COMPUTER NETWORK COMMUNICATIONS ~~INTERCOMMUNICATION PREPROCESSOR~~

LISTING OF CLAIMS

1.(previously presented) A message processing device for communicating with remote units over at least one data network and with at least one dedicated CPU comprising:

a first execution unit for receiving a message to be processed from a remote monitoring unit and determining a kind of processing treatment to be performed with the received message based on configuration data of said message processing device and information encoded in the received message;

a second execution unit comprising at least one process execution unit for executing a process to perform said determined processing treatment on said received message, wherein said second execution unit additionally comprises a first set of registers for storing message specific information specifying the data contents and said determined processing treatment of the received message and wherein said at least one process execution unit comprises three or more process execution units having access to said first set of registers to obtain said message specific information for performing said determined processing treatment and wherein said process execution units are selectively invoked based on the determined processing treatment; and

a third execution unit for presenting the result of the determined processing treatment to be forwarded to a destination unit comprising at least one dedicated CPU.

2. (currently amended) The <u>message processing</u> device according to claim 1, wherein said first execution unit comprises a memory device for storing control information being used to determine the processing treatment to be performed with the received message.

3-7 (canceled)

8. (currently amended) The <u>message processing</u> device according to claim 1, wherein said second execution unit comprises a second set of registers being connected to said at least one process execution unit for storing information needed by said process execution unit.

9. (canceled)

10. (currently amended) The <u>message processing</u> device according to claim 1, wherein said second execution unit is configured to monitor the first set of registers in order to start processing the received message once a process execution unit is available for processing.

11. (canceled)

12. (currently amended) The <u>message processing</u> device according to claim 1, wherein said third execution unit is configured to monitor a first set of registers in order to start presenting the result of said message processing once the processing of said received message is complete.

13. (currently amended) The <u>message processing</u> device according to claim 2, wherein said first execution unit comprises an interface for configuring said memory device

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with said control information being used to determine the processing treatment to be performed with the received message.

14. (currently amended) [[A]] The message processing device as recited in claim 1, further comprising a switchboard device for providing a communication connection to said data network and to said dedicated CPU.

15. (previously presented) The message processing device according to claim 14, wherein said switchboard device comprises a multiplexer connected to said first and third execution unit and for providing connections to several bus adapters and said CPU.

16. (previously presented) The message processing device according to claim 15, wherein said switchboard device further comprises an interrupt bus connected to the first execution unit and to several bus adapters and said CPU.

17. (previously presented) The message processing device according to claim 15, wherein said switchboard device further comprises a controller for controlling said multiplexer, whereby said controller is configured to be controlled by either said third execution unit or said CPU.

18. (previously presented) The message processing device according to claim 16, wherein said switchboard device further comprises a controller for controlling said multiplexer, whereby said controller is configured to be controlled by either said third execution unit or said CPU.

19. (previously presented) A method for message processing in a system for communicating with remote units over at least one data network and with at least one dedicated CPU the method comprising the steps of:

receiving a message to be processed from a remote monitoring unit and determining the kind of message processing treatment to be performed with said received message based on configuration data of said message processing device and information encoded in the received message and determining a number of process execution units required to perform said message processing treatment;

storing message specific information specifying the contents of said received message and said determined message processing treatment of said received message into a first set of registers;

monitoring at least one process execution unit and said first set of registers in order to start processing said received message once the required number of process execution units are available for processing;

performing said determined message processing treatment, whereby said processing is executed sequentially, in parallel, or both sequentially and in parallel;

monitoring said first set of registers in order to start presenting the result of said determined message processing treatment once the processing of said message is complete; and

presenting the result of said message processing to be forwarded to a destination unit comprising at least one dedicated CPU.

20. (previously presented) The method according to claim 19, further comprising an initial step of storing control information being used to determine the message processing treatment to be performed with the received message.

21. (previously presented) A computer program product stored on a computer usable medium, comprising a computer readable program for causing a computer to perform a method for communicating with remote units over at least one data network having at least one CPU, said method comprising:

receiving a message to be processed from a remote monitoring unit and determining the kind of message processing treatment to be performed with said received message based on configuration data of said message processing device and information encoded in the received message and determining a number of process execution units required to perform said message processing treatment;

storing message specific information specifying the contents of said received message and said determined message processing treatment of said received message into a first set of registers;

monitoring at least one process execution unit and said first set of registers in order to start processing said received message once the required number of process execution units are available for processing;

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performing said determined message processing treatment, whereby said processing is executed sequentially, in parallel, or both sequentially and in parallel;

monitoring said first set of registers in order to start presenting the result of said determined message processing treatment once the processing of said message is complete; and

presenting the result of said message processing to be forwarded to a destination unit comprising at least one dedicated CPU.

REMARKS

Based on the foregoing amendments, Applicants respectfully request entry of the amendments and allowance of the claims.

Respectfully submitted,
D. E. Staiger, et al

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